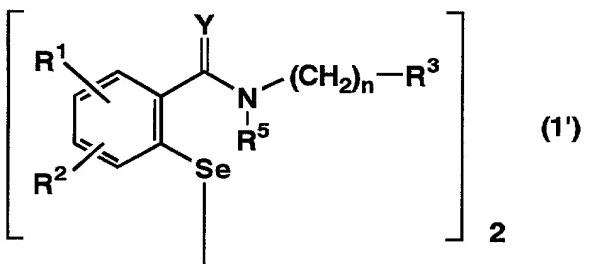
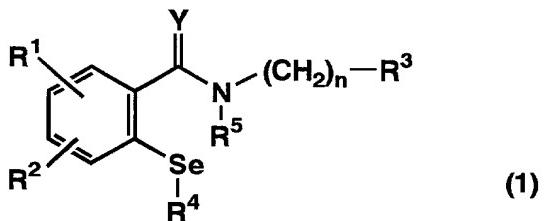


ABSTRACT

A substrate for thioredoxin reductase which comprises a compound represented by the following general formula (I) or (I'):



wherein R¹ and R² independently represent a hydrogen atom, a halogen atom, a trifluoromethyl group and the like; R³ represents an aryl group, an aromatic heterocyclic group and the like; R⁴ represents a hydrogen atom, a hydroxyl group, a -S-α-amino acid group and the like; R⁵ represents a hydrogen atom or a C₁-C₆ alkyl group; Y represents oxygen atom or sulfur atom; n represents an integer of from 0 to 5; and the selenium atom may be oxidized, whose example includes 2-phenyl-1,2-benziselenazol-3(2H)-one or a ring-opened form thereof. The substrate is reduced by thioredoxin reductase in the presence of NADPH and enhances peroxidase activity of thioredoxin reductase.